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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,066	10/09/2001	Jeff Powell	2001P07471US01	6634
24500	7590	01/07/2004	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY LAW DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/974,066

### Applicant(s)

POWELL, JEFF

### Examiner

Minh-Chau T. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-8, 10, 13-17, 19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8, 10, 13-17, 19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 6, 10, 13, 16, 17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leliaert (3,853,509; 40, 80, 82, 86, 90 & 92 in Fig. 3a; col. 2, lines 20-57; col. 4, line 65 through col. 5, line 30), in view of Wong et al (5,873,920; 10, 14, 17 & 18 in Fig. 4, col. 2, lines 14-36 and lines 45-59) and Shively et al (5,954,847; col. 2, lines 23-35 and lines 50-67; col. 3, lines 35-52).

Leliaert discloses an air filter comprising a pleated filter support having support members and each support member spaced from an adjacent support member to at least partially form a pleated shape (86 & 92 in Fig. 3a), and a filter (40) at least partially supported by support members wherein the pleated filter support comprises a plurality of posts in at least a partially annular form (see Fig. 3a). Leliaert discloses a method of manufacturing an air filter comprising the steps of arranging a plurality of posts into pleats, forming the pleats into a partially annular form, adhering a filter to the pleats, and sealing the filter to the support. Claims 6, 10, 13,

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16, 17, 19 and 21 differ from the disclosure of Leliaert in that the filter housing comprising the first and second sealing members and the filter media being a low restriction paper. Both Wong et al and Shively et al disclose an air filter for the racing car engine wherein the filter media is a low restriction media. Shively et al disclose the filter media being a low restriction paper such as cellulose. Both Wong et al and Shively et al disclose a filter housing comprising a first sealing member and a second sealing member wherein the filter media and its support are sandwiched between the first and second sealing members. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the filter apparatus as taught by Leliaert with sealing members and low restriction filter media as taught by either Wong et al or Shively et al in order to provide a filter support for vehicle engine which increases the capacity or reduce the pressure drop without increasing in the space and to provide for increased filter surface area without increasing in size of the filter device.

2. Claims 7, 8, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leliaert (3,853,509; 40, 80, 82, 86, 90 & 92 in Fig. 3a; col. 2, lines 20-57; col. 4, line 65 through col. 5, line 30), in view of Wong et

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al (5,873,920; 10, 14, 17 & 18 in Fig. 4, col. 2, lines 14-36 and lines 45-59) and Shively et al (5,954,847; col. 2, lines 23-35 and lines 50-67; col. 3, lines 35-52), as applied supra to paragraph 1 above, and further in view of Harms et al (6,348,086 B1; col. 4, lines 15-32).

Claims 7, 8, 14 and 15 call for the filter and filter support connected by welding or by adhesives. Harms et al disclose the filter meshes and their supports are connected or held together by adhesives, spot welding or a variety of other techniques. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have the filter and its support connected via welding or adhesives as taught by Harms et al in the filter apparatus of Leliaert to provide firm attachment of the filter media to its support to insure no filter bypassing thus to enhance the filtration efficiency.

### ***Response to Amendment***

3. Applicant's arguments filed on November 26, 2003 have been fully considered but they are not persuasive.

Applicant's main argument is that none of the cited references discloses "a first sealing member and a second sealing member wherein the support members are sandwiched between the first and second sealing

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members" as amended in independent claim 21, "a low restriction filter paper" as in claims 6 and 13, "the filter and support are connected by welding" as in claims 7 and 14, "a vehicle flow body" as in claim 10. The Examiner maintains Leliaert as the primary reference to show an air filter comprising a pleated filter support having support members and each support member spaced from an adjacent support member to at least partially form a pleated shape (86 & 92 in Fig. 3a), and a filter (40) at least partially supported by support members wherein the pleated filter support comprises a plurality of posts in at least a partially annular form (see Fig. 3a), as claimed. The Examiner newly introduces the Wong et al and Shively et al references as secondary references to show a filter device for a "racing car engine" having "a first sealing member and a second sealing member wherein the support members are sandwiched between the first and second sealing members" (see 17 and 18 in Fig. 2 and col. 2, lines 31-36 of Wong et al, or 18 and 20 in Fig. 1 and col. 2, lines 25-29 of Shively et al) as amended in independent claim 21, "a low restriction filter paper" (see col. 3, lines 35-52 of Shively et al) as in claims 6 and 13. The Examiner newly introduces the Harms et al as tertiary reference to show the filter meshes and their

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supports are connected or held together by adhesives, spot welding or a variety of other techniques as claimed (see col. 4, lines 15-32).

4. Applicant's arguments with respect to claims 6-8, 10, 13-17, 19 and 21 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed in paragraphs 1 and 2 above.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau Pham whose telephone number is (571) 272-1163.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-0987.

Applicant's response may be mailed or faxed. However, note that some correspondence may not be faxed, i.e. certain correspondence requiring an original signature and certain drawing changes (see MPEP 502.01). The fax number for Technology Center 1700 for After Final communications is (703) 872-9311. If the response is faxed, a duplicate mailed copy of the facsimile transmission is not required and will only serve to delay processing of your application.



MCP

December 18, 2003